

### REMARKS

Claims 1-27 were examined in the office action dated June 07, 2006. All the claims were rejected. Reconsideration is respectfully requested further in view of the following remarks.

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#### *Claim rejections under 35 U.S.C. 112*

Claims 1, 8, 14 and 20 were rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. In particular, the inclusion of the term “physical” to qualify “port” in claims 1, 8, 14 and 20 was objected to. Applicants respectfully traverse.

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Applicants first set out the relevant standard in examining the amended claims with respect to the written description requirement:

While there is *no in haec verba* [emphasis in original] requirement, newly added claim limitations must be supported in the specification through express, **implicit, or inherent disclosure.**  
(MPEP Section 2163.I.B. New or Amended Claims, *Emphasis Added*)

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Based on the above, it is believed that the applicable law/practice expressly recognizes that the precisely same words need not be present in the originally filed specification, and the written description requirement would be satisfied if the amended language would be understood to be implicit or inheritance in the original disclosure.

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Applicants assert that the term “physical” (as in “physical port”) is implicit and/or inherent in the description provided in the specification as originally filed, and that would be apparent to one skilled in the relevant arts. Some relevant portions from the specification supporting the assertion is reproduced below:

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Gateways are often used to enable users at remote locations (e.g., at homes) to access different target systems (e.g., a computer system on a local area network). A gateway provides the **connectivity** between remote systems (e.g., personal computers) at remote locations with the target systems of interest to enable different network applications.

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One of the common tasks performed by a gateway is **forwarding (or routing)** of packets. In a typical situation, the gateway **receives a packet on one port (e.g.,**

*from a remote system) and forwards the packet on another port (e.g., to a target system).*

(Page 2, lines 11-22 of the specification, *Emphasis Added*)

...

5           A gateway device in accordance with the present invention determines both the NAT information and forwarding information necessary to process a packet using a single search. The NAT information is used to replace a original address in a packet with a new address specified by the NAT information, and *the forwarding information (either directly or indirectly) specifies a port interface on which the packet is to be forwarded.* By implementing a single search operation to determine  
10       both NAT and forwarding information, the number of memory accesses may be reduced, thereby potentially enhancing the throughput performance of the gateway device.

(Page 3 line 23 through Page 4 line 5 of the specification, *Emphasis Added*)

15           Thus, the term 'port' in the specification is described associated with forwarding/routing, which is based on packet switching as would be readily appreciated by one skilled in the relevant arts. Packet switching (as implemented by a switch/router/gateway, etc.), in turn, generally entails receiving packets on one physical port and forwarding the same on another physically, thereby providing connectivity between a large number of networks.

20           Accordingly, the term 'port' of the specification would impliedly or implicitly mean 'physical port'.

          The word physical has been chosen to distinguish from the TCP/UDP ports the Examiner seeks to equate with in rejecting the pending claims under 35 U.S.C. § 102. As would also be appreciated by one skilled in the relevant art, the TCP/UDP ports (see for  
25       example RFC 793) are used to name/identify the ends of logical connections between end systems (which is different from the forwarding/routing aspect of packets noted in the specification of the instant application).

          Withdrawal of the rejection under 35 U.S.C. § 112 is respectfully requested, at least for the reasons noted above.

30           To the extent the above explanation (or record otherwise) is found not to be persuasive to withdraw the rejection, the Examiner is invited to suggest alternative language

which overcomes the rejections, as appears to be encouraged in MPEP Section 2163:

When appropriate, *suggest amendments to the claims* which can be supported by the application's written description, being mindful of the prohibition against the addition of new matter in the claims or description. See Rasmussen, 650 F.2d at 1214, 211 USPQ at 326.  
(MPEP Section 2163.04.I.B, *Emphasis Added*)

***Claim rejections under 35 U.S.C. 102(e)***

Claims 1-2, 8-9, 14-15 and 20-21 were rejected under U.S.C. 102(e) as being anticipated by both US Patent 6,888,837 issued to Cunningham *et al* (hereafter "Cunningham") and US Patent 6,331,984 issued to Luciani (hereafter "Luciani"). Applicants respectfully traverse the rejections.

Previously presented claim 1 recites:

A method of processing a packet in a gateway device comprising a plurality of physical ports, each of said plurality of physical ports being coupled to a corresponding one of a plurality of communication paths providing connection with a corresponding network, said method comprising:  
providing a search utility in said gateway, said search utility enabling the ***retrieval of both a forwarding information and a network address translation (NAT) information necessary for processing said packet in a single search operation***, wherein said NAT information specifies a new address for an original address in said packet, ***said forwarding information specifying one of said plurality of physical ports for forwarding said packet***;  
receiving said packet containing said original address;  
determining said forwarding information and said NAT information for said packet in a single search operation by using said search utility;  
substituting said new address for said original address in said packet;  
and  
forwarding said packet with said new address on the specified one of said plurality of physical ports. (*Emphasis Added*)

Thus, claim 1 provides a search utility enabling retrieval of both a NAT information and a forwarding information specifying a physical port (for forwarding a packet) in a single search operation. Neither Cunningham nor Luciani discloses or reasonably suggests such a feature.

In particular, with respect to Cunningham, the examiner appears to rely on the

"Translated Destination Port" and "Destination Port" fields/entries of the table of Figure 2D of Cunningham as anticipating the "physical port" of claim 1.

It is believed that the "Translated Destination Port" and "Destination Port" of Cunningham refer to the specific transport layer port numbers (e.g. User Datagram Protocol (UDP) or Transport Control Protocol (TCP) port number), which are clearly different from the physical ports recited in claim 1.

The Examiner is respectfully requested to point to the portions of Cunningham which would teach otherwise, while being reminded that the initial burden of coming forth with adequate evidence for rejecting a claim rests with the Patent Office.

Thus, claim 1 is allowable over Cunningham. The remaining independent claims 8, 14 and 20 are also allowable over Cunningham at least for one or more of similar reasons. The dependent claims are allowable at least as depending from corresponding allowable base claim

Similarly, with respect to Luciani, the examiner appears to equate "port" field 205 of Figure 2 with the "physical port" of claim 1. The port of Luciani also is believed to refer to the specific transport layer port number (similar to in Cunningham) associated with the corresponding local and global addresses (fields 210 and 220 of Figure 2), at least based on the below disclosure:

... Since multiple Transport layer sessions may exist at any moment in time for a particular host to which an IP address is assigned, the table further ***specifies the Transport layer port number (e.g., User Datagram Protocol (UDP) or Transport Control Protocol (TCP) port number) associated with the local and globally uni*** (Column 5, lines 34-39 of Luciani, ***Emphasis Added***)

Thus, claim 1 is allowable over Luciani. The remaining independent claims 8, 14 and 20 are also allowable over Luciani for similar reasons. The dependent claims are allowable at least as depending from corresponding allowable base claim.

***Conclusion***

Thus, all the objections and rejections are believed to be overcome, at least in view of the above remarks, and that all the presented claims are in condition for allowance. The Examiner is invited to telephone the undersigned representative if it is believed that an  
5 interview might be useful for any reason.

Respectfully submitted,

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Signature

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